# Project Final Portfolio Specs

Written documentation should follow all the specifications for written documentation as laid out in the general lab specs. In addition, the report should address these project-specific specifications.

## Proficiency

### Technical Information

- ☐ Bill of materials including all relevant components with quantities, part numbers, and prices.
- ☐ Microcontroller design overview: description of what the MCU is doing.
- ☐ FPGA design overview: what is the FPGA doing along with main design features.

### Written Documentation

- ☐ Names and short bios of team members with link to personal website or LinkedIn profile.
- ☐ Abstract which briefly describes the main purpose and operation of the system.
- ☐ New hardware listed in section with description
- ☐ Results: What are the main results of your project.
- ☐ References: Citation (and hyperlinks where relevant) to any outside resources that were referenced in the design of the project.
- ☐ Acknowledgements
- ☐ All project code (software and HDL) included in Git repository

### Writing and Organization

- ☐ Website is well organized with clear separation of relevant information.
- ☐ No more than a few minor spelling or grammar issues.
- ☐ No missing placeholders (e.g., XX) or dead hyperlinks.

## Excellence

### Technical Documentation

- ☐ Schematics are neatly drawn with a CAD program (e.g., KiCad). All necessary labels present (pins names & numbers, part numbers, etc.)
- ☐ Block diagram is neat and completely specified (e.g., all communication protocols labeled, bus widths indicated, etc.)

### Written Documentation

- ☐ New hardware described with notes about the features to be implemented and how they go beyond the previous material covered in the course.
- ☐ Results section clearly and **quantitatively** outlines the key performance aspects of the design with commentary to explain the design decisions.
- ☐ References are formatted with a clean and consistent format.
- ☐ All project code is accompanied by comments throughout
- ☐ Git repository contains a README.md file to describe the main elements of the project and where they are found.

### Writing and Organization

- ☐ Excellent spelling and grammar throughout

### Multimedia Documentation

- ☐ Short video showcasing a demonstration of the project
- ☐ Photos documenting final design

## Optional

- ☐ Photos documenting the build process